

.

HTML+DAttributes			Description
<form ac<="" td=""><td>TION="url" FROM "file TO PRINTE TO "file nan FROM SCR TO SCR</td><td>R ne"</td><td>To/From Web Server URL From Terminal Local File To Local Printer To Terminal Local File From Smart Card Reader To Smart Card Reader</td></form>	TION="url" FROM "file TO PRINTE TO "file nan FROM SCR TO SCR	R ne"	To/From Web Server URL From Terminal Local File To Local Printer To Terminal Local File From Smart Card Reader To Smart Card Reader
METHOD="GET" "POST" "PAYMENT"		<i>n</i>	Retrieve Data Store Data Store Data Directive to deliver INPUT data to a private Payment Network for authorization and settlement.
SQL <datab< td=""><td>pase name></td><td>SQL statement database table</td></datab<>		pase name>	SQL statement database table
	Attribute TYPE = NAME = VALUE = CHECKED = SIZE = MAXLENGTH =	Value "text" "password" "checkbox" "radio" "submit" "reset" <field <initial="" names="" td="" value<=""><td></td></field>	
Attribute	HTML + DValue	Terminal Devic	<u>e</u>
TYPE =	"MSRT1" Mag Stripe Reader - Track 1 "MSRT2" Mag Stripe Reader - Track 2 "KEY" Terminal Command Keypad "PIN" PIN Pad "BCW" Bar Code Wand "MICR" Check MICR Reader "AMT" Dollar amount key input mask INT" Integer key input mask Input from Local Variable "AUTOSUEMIT" Submit FORM to ACTION URL		
NAMÉ=	ip_address host_phone tid work_key datetime deposit_acct	Local Variable Local Variable Local Variable Local Variable	- Terminal's IP Address - Local Internet Access Phone Number - Terminal ID - PIN encryption working key - Date and time - Merchant Deposit Account

FIG.2

SQL Statements

The following SQL commands represent a subset of the entire command set that varies by database vendor.

```
HTML+D Attributes
                                     Description
SELECT*, field_name_
                                    Request field_name (one ormany)
                                    from a database table
        FROM =_
                                    Database table name
        WHERE=<condition>
                                    Conditional selection of data
                name = "constant"
name LIKE "constant"
name IN "constant"
                AND
                OR
        ORDER=ASC
                                    Request in ascending order
                DESC
                                    _descending
                                    _by2's
        GROUP=<name>
INSERT TABLE=
                                    Insert new data in database table
       VALUES="constants"
UPDATEFROM
       Update field_name in database table
       SET=field_name="constant"
       [WHERE=<condition>]
                                    Update if WHERE clause is satisfied
DELETERROM 
                                    Delete all columns that satisfy
       [WHERE=<condition>]
                                    WHEREclause
CREATE TABLE<table_name>
                                    Create database table
       PRIMARY KEY < name>
```

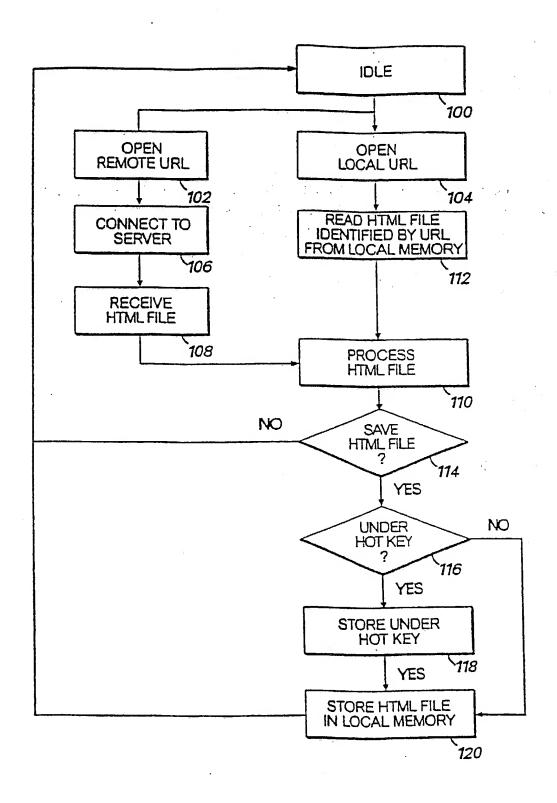
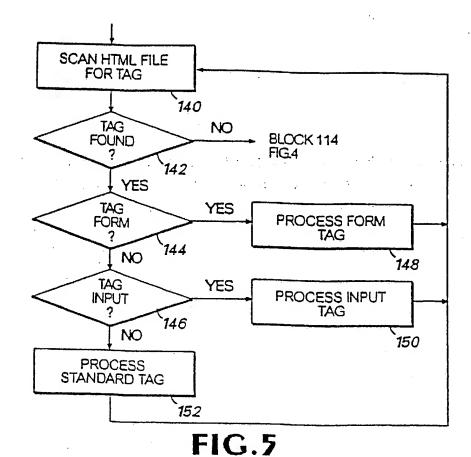
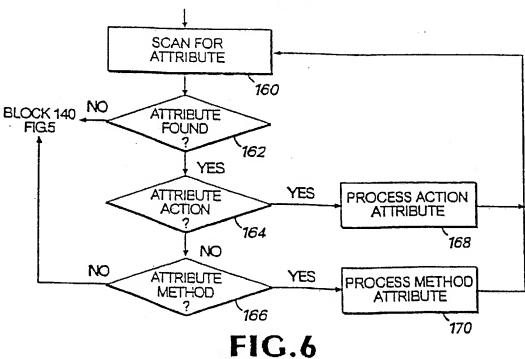


FIG.4





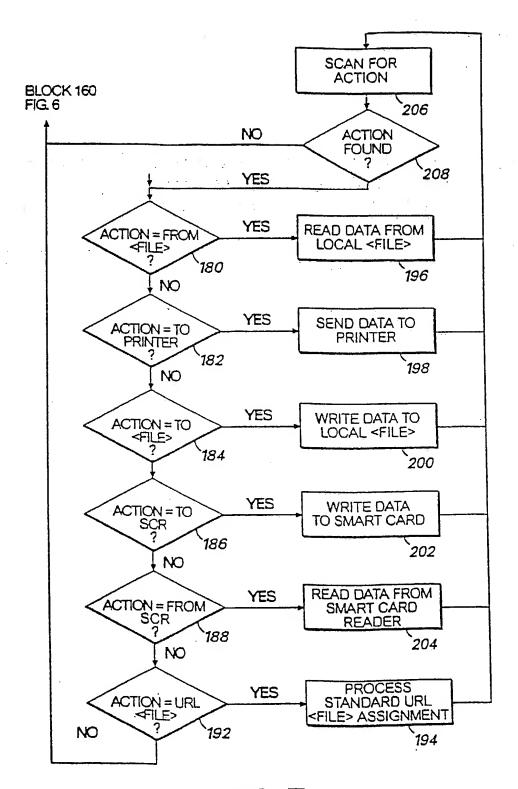
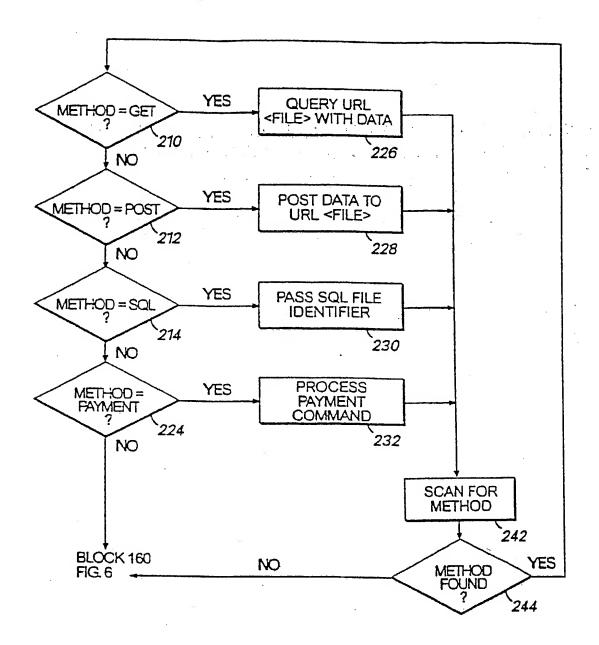


FIG.7



1

FIG.8

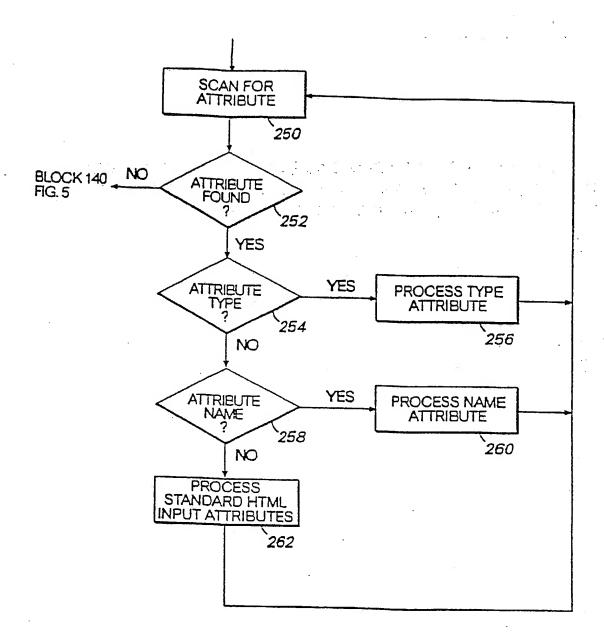
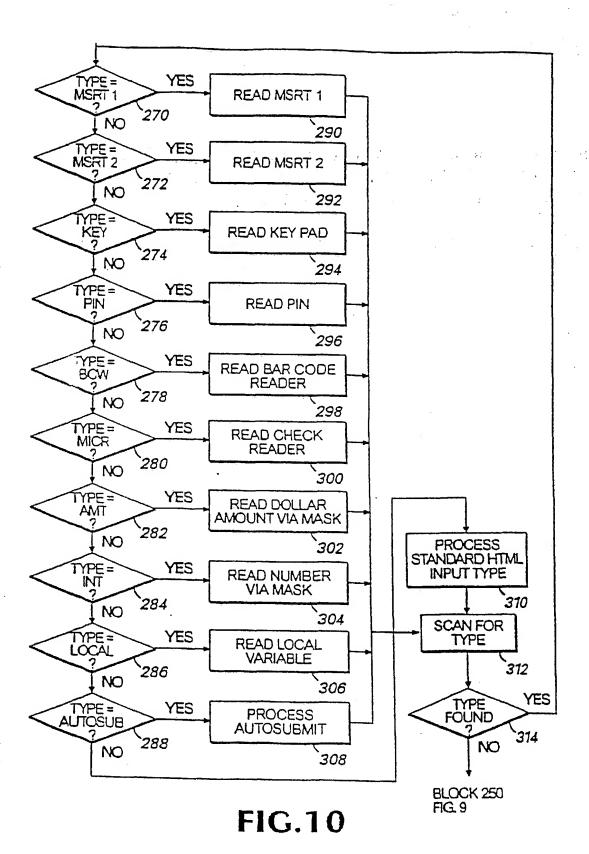


FIG.9



* Ni) ..

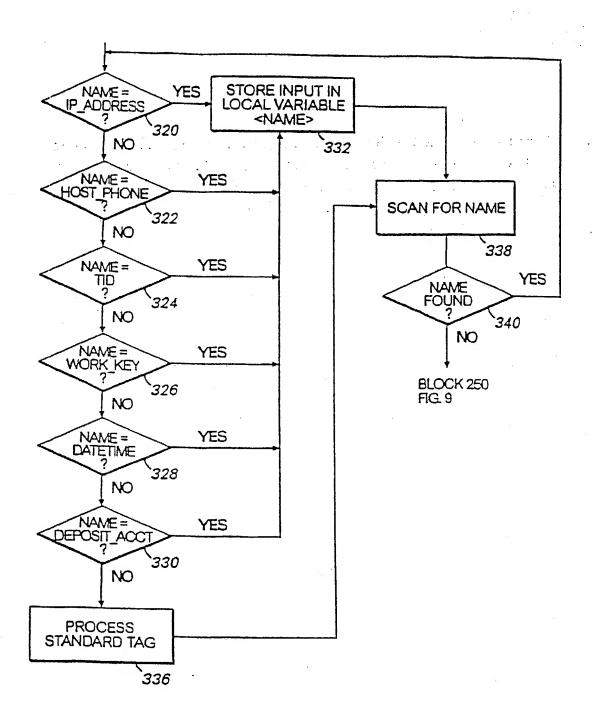


FIG.11

- 1. <FORM ACTION=URL
- METHOD= GET>
- 2 <FORM ACTION=URL
- METHOD= POST>
- 3. <FORM ACTION=URL
- METHOD= SQL <database_name>

FIG.12

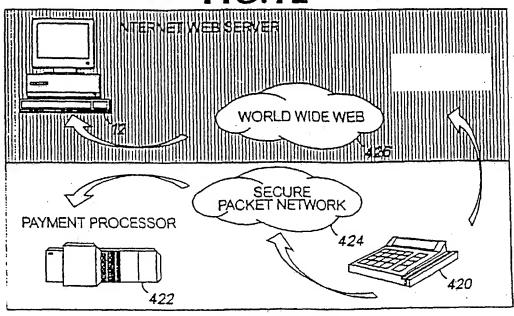


FIG.13A

<FORM ACTION=<filename>
<INPUT TYPE=AUTOSUBMIT>

METHOD=PAYMENT>

</FORM>

FIG.13B

- <FORM ACTION=dsinet METHOD=PAYMENT>
- <INPUT TYPE=LOCAL NAME=DEPOSIT_ACCT VALUE=123456890234567890>
- <INPUT TYPE=AUTOSUBMIT>
- </FORM>

FIG.13C

```
1.a. Transaction Request HTML+D
                            500
  <HTML>
  <ECDY>
  <FORM ACTION=cbase_URL</pre>
      METHOD=SQL
          "BEGIN TRAN
          IF NOT EXISTS ( SELECT substring(account, 1, 20) FROM auth_table)
              BEGIN
              INSERT TABLE=log_table VALUES=(getdate(),tid, substring (account, 1,20).
              substring( account, 22, 4), amount)
              SELECT * FROM log_table WHERE trandate = getdate()
              END
           ELSE SELECT * FROM error_table WHERE error_no=1
           COMMIT TRAN'>
 <!NPUT TYPE="LOCAL" NAME=tic>
 ENTER ACCOUNT NUMBER:
 ENTER AMOUNT
 <!NPUT TYPE="AMT" SIZE=8 NAME=amount>
 <!NPUT TYPE="AUTOSUBMIT">
  </FORM>
  <BODY>
  </HTML>
1.b. Transaction Accepted Response
                             510
  <HTML>
  <800Y>

◆FORM ACTION=TO PRINTER METHOD=POST>

  JUNE 1 1995
                       10:30AM
                                  PURCHASE</P>
  TERMINAL ID:
                                   999999994/P>
  ACCOUNT NUMBER
  EXPIDATE:
                                       99/99</P>
  AMOUNT
                                     $999999</P>
 AUTH NUMBER
                                   9999999994/P>
 CUSTOMER SIGNATURE 
 </FORM>
 APPROVED:999999994/P>
 </BODY>
 </HTML>
1.c. Transaction Declined or Submit Error Response
                                          520
 <HTML>
 <80DY>
 DECLINED & MESSAGE>
 </BODY>
 </HTML>
                             FIG.14
```

```
2.a. Transaction Request HTML+D
<HTML>
<800Y>
<FORM ACTION=dbase URL
METHOD-SOL BEGIN TRAN
      IF NOT EXISTS ( SELECT substring(account, 1, 20) FROM auth_table)
      BEGIN
            INSERT TABLE=log_table VALUES=(getdate(),tid, substring( account, 1,20), substring( account, 22, 4), amount)
      END
      ELSE BEGIN
                  SELECT * FROM error_table WHERE error_no=1
                  RETURN
            END
      INSERT TABLE=order_table VALUES=( getdate(), cust_name,address,city, state, zip,
            part_code, unit_price, tax, ship_method, ship_chrg, unit_price + tax +
            ship_chrg, substring( account, 1, 20), substring( account, 22, 4))
      SELECT * FROM order_table WHERE trandate = getdate()
      COMMIT TRAN">
CUSTOMER NAME
<!NPUT TYPE='TEXT'SIZE=30 NAME=cust_name>
ADDRESS:
<!NPUT TYPE=TEXT SIZE=40 NAME=address>
CITY:
<!NPUT TYPE="TEXT" SIZE=20 NAME=city>
STATE
<!NPUT TYPE='TEXT' SIZE=2 NAME=state>
ZIP:
INPUT TYPE="TEXT" SIZE=10 NAME=address><tp>
SCAN FART CODE

√NPUT TYPE="BCW" SIZE=9 NAME=part_code>
ENTER UNIT PRICE
INPUT TYPE="AMT" SIZE=8 NAME=unit_price>
TAX:
<!NPUT TYPE="AMT" SIZE=5 NAME=taxx=tp>
SHIPPING METHOD:
INPUT TYPE="TEXT" SIZE=10 NAME=ship_method>
SHIPPING AMOUNT:

√NPUT TYPE="AMT" SIZE=5 NAME=ship chro>
SLIDE CARD:
INPUT TYPE= MSRTZ" SIZE=40 NAME==0000unt>

√NPUT TYPE="SUBMIT">

</FOR<
<\EOOY>
<HTML>
```

FIG.15A

```
2.b. Transaction Accepted Response
  <HTML>
  <Y009>

√FORM ACTION=TO PRINTER METHOD=POST>

 ORDER # 999999999 APPROVED
 JUNE 1 1995
             10:30AM
                     PURCHASE</P>
 TERMINAL ID:
                      ADDRESS:
 STATEXX
                 ACCOUNT NUMBER
                 9999999999999999/p>
 EXP CATE
                            99/99</0>
 FART CODE
 UNIT PRICE
                          $9999.99
 SHIP METHODXXXXXXX CHARGE
                          $9999.99
 TOTAL AMOUNT:
                          $9999.29</b>
 AUTH NUMBER
 CUSTOMER SIGNATURE (1)>
 <FORM>
 <BODY>
 </HTML>
2c. Transaction Declined or Submit Error Response
                                560
 <HTML>
 <BODY>
 DECLINED <error code>
 4BODY>
 </HTML>
```

1

```
3.a. Transaction Request HTML+D
<HTML>
<800Y>
<FORM ACTION=dbase_URL</pre>
METHOD SQL
    "INSERT TABLE=order_table VALUES=( getdate(), cust_name.address.city, state, zip.
         part_code, unit_price, tax, ship_method, ship_chrg.unit_price + tax +
         ship_chrg, substring( account, 1, 20) , substring( account, 22, 4))
SELECT * FROM order_table WHERE trandate = getdate()">
<INPUT TYPE="LOCAL" NAME=tid>
CUSTOMER NAME:
<INPUT TYPE="TEXT" SIZE=30 NAME=cust_name>
ADDRESS:
<INPUT TYPE="TEXT" SIZE=40 NAME=address>
CITY:
<INPUT TYPE="TEXT" SIZE=20 NAME=city>
STATE:
<INPUT TYPE="TEXT" SIZE=2 NAME=state>
ZIP:
<INPUT TYPE="TEXT" SIZE=10 NAME=address>
ENTER PART CODE:
<INPUT TYPE="TEXT" SIZE=10 NAME=part_code>
ENTER UNIT PRICE:
<INPUT TYPE="AMT" SIZE=8 NAME=unit_price>
<INPUT TYPE="AMT" SIZE=5 NAME=tax>
SHIPPING METHOD:
<INPUT TYPE="TEXT" SIZE=10 NAME=ship_method>
SHIPPING AMOUNT:
<INPUT TYPE="AMT" SIZE=5 NAME=ship_chrg>
<INPUT TYPE="SUBMIT" >
</FORM>
</BODY>
</HTML>
```

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FIG. 16A

3.b. Transaction Accepted Response

```
<HTML>
<800Y>
<FORM ACTION=TO PRINTER METHOD=POST>
ORDER # 999999999 APPROVED
JUNE 1 1995
          10:30AM
                   PURCHASE</P>
TERMINAL ID:
                    999999994/P>
ADDRESS:
STATE: XX
              ZIPXXXXXXXXX
PART CODE:
                      999999994/p>
UNIT PRICE
                        $9999.99
SHIP METHODXXXXXXX CHARGE:
                        <q/><q><q>20
TOTAL AMOUNT:
                        $9999.99
</FORM>
<FORM ACTION=<file_name> METHOD=PAYMENT>
<INPUT TYPE=AUTOSUBMIT>
</FORM>
</BODY>
</HTML>
```

3.c. Transaction Declined or Submit Error Response

```
<ht>HTML><br/><80DY><br/>DECLINED <error code><br/></BODY><br/></HTML>
```

```
4.a. Transaction Request HTML+D
```

```
<HTML>
<800Y>
<FORM ACTION=SCR1 METHOD=POST>
<INPUT TYPE="LOCAL" NAME=ticb
SLIDE CARD:
<INPUT TYPE="MSRT2" SIZE=40 NAME=track2>
ENTER AMOUNT:
<INPUT TYPE="AMT" SIZE=8 NAME=amount>
<INPUT TYPE="LOCAL" NAME=work_key>
<INPUT TYPE="AUTOSUBMIT">
<FORM>
<FORM>
</FORM>
</
```

4.b. Transaction Accepted HTML+D

```
<HTML>
<80DY>
<FORM ACTION=TO PRINTER METHOD=POST>
DATE:99/99/99
                           TIME:9999A</P>
ACCOUNT NUMBER
                  999999999999999999
EXPICATE
AMOUNT:
                              $9999.99
AUTH NUMBER
                            </FORM>
APPROVED:999999999994P>
</BODY>
</HTML>
```

4.c. Transaction Declined or Submit Error Response

```
<HTML>
<BODY>
DECLINED <error code>
<BODY>
</HTML>
```

FIG.17A

```
5.a. Transaction Request HTML+D
  <HTML>
  <800Y>
  <FORM ACTION=SCR2 METHOD=POST>
  <INPUT TYPE="LOCAL" NAME=tid>
  ENTER PIN:
  <INPUT TYPE="PASSWORD" SIZE=4 NAME=pin>
  ENTER AMOUNT:
  <!NPUT TYPE="AMT" SIZE=8 NAME=amount>
  <!NPUT TYPE="LOCAL" NAME=work_key>
  <INPUT TYPE="AUTOSUBMIT">
  </FORM>
  </BODY>
  </HTML>
5.b. Transaction Accepted HTML+D
  <HTML>
  <BODY>
  <FORM ACTION=TO PRINTER METHOD=POST>
                                 TIME:9999A</P>
  DATE-99/99/99
                      99999999999999999999/P>
  ACCOUNT NUMBER
                                      99/99</P>
  EXP DATE:
                                    $9999.99</P>
  THUOMA
                                  999999994/P>
  AUTH NUMBER
  </FORM>
  APPROVED:99999999994/P>
  </BODY>
  </HTML>
5.c. Transaction Declined or Submit Error Response
  <HTML>
   <80DY>
  DECLINED <error code>
   </BODY>
   </HTML>
```

FIG.17B

```
6.a. Transaction Request HTML+D
  <HTML>
   <BODY>
  <FORM ACTION=host URL METHOD=POST>
  <!NPUT TYPE="LOCAL" NAME=tid>
  SLIDE CARD
  <INPUT TYPE="MSRT2" SIZE=40 NAME=track2>
  <INPUT TYPE="PIN" SIZE=4 NAME=pin>
  ENTER AMOUNT:
  <INPUT TYPE="AMT" SIZE=8 NAME=amount>
  <!NPUT TYPE="AUTOSUBMIT">
  </FORM>
  </BODY>
  </HTML>
6.b. Transaction Accepted HTML+D
  <HTML>
  <BODY>
  <FORM ACTION=TO PRINTER METHOD=POST>
  DATE:99/99/99
                                 TIME:9999A</P>
  TERMINAL ID:
                                  99999999</P>
  ACCOUNT NUMBER
                      99999999999999999999/P>
  EXP DATE:
                                      99/99</P>
  AMOUNT
                                    $9999.99</P>
  AUTH NUMBER
                                  999999994/P>
  </FORM>
  APPROVED:999999999</P>
  </BODY>
  </HTML>
6.c. Transaction Declined or Submit Error Response
  <HTML>
  <BODY>
  DECLINED <error code>
  <!NPUT TYPE="LOCAL" NAME=work_key VALUE="999999999999999999">
  </BODY>
  </HTML>
```

FIG.18

```
7.a. Transaction Request HTML+D
  <HTML>
  <BODY>
  <FORM ACTION=dbase_URL
         METHOD=SQL
                 "IF EXISTS (SELECT account FROM check_table)
                      SELECT * FROM check_table WHERE account = DDAaccount
                  ELSE SELECT * FROM error_table WHERE error_no=1">
  <INPUT TYPE="LOCAL" NAME=tid>
  SCAN CHECK:
  <INPUT TYPE="MICR" SIZE=20 NAME=account>
  ENTER AMOUNT
  <INPUT TYPE="AMT" SIZE=8 NAME=amount>
  <INPUT TYPE="AUTOSUBMIT">
  <FORM>
  </BODY>
  </HTML>
7.b. Transaction Accepted Response
  <HTML>
  <BODY>
  <FORM ACTION=TO PRINTER METHOD=POST>
  DATE:99/99/99
                               TIME:9999</P>
 TERMINAL ID:
                               999999994P>
  AMOUNT
                                $9999.99</P>
 AUTH NUMBER
  <FORM>
 APPROVED:9999999999999/P>
 <BODY>
 </HTML>
7.c. Transaction Declined or Submit Error Response
  <HTML>
  <BO0Y>
  DECLINED <error code>
  ₹BODY>
  </HTML>
```

```
8.a. Transaction Request HTML+D
                    <HTML> <800Y>
                  FORM ACTION Down URL
METHOD SOL
BEGIN TRAN
                                                                                                                                      IF NCT EXISTS (SELECT substring (account 51 20) FROM auth_table)
                                                                                                                                                                          EXISTS (SELECT SUBSTITUTION DESCRIPTION OF SELECT OF BAFFICM CAST IN THE SELECT ATTOMIC = ATTOMIC - (points / D1)
SELECT OUT ball = Cut bal + (amount * D1)
UPCATE TABLE = Cut int VALUES = (gentate), account, cur bal-points)
SELECT *FROM by Eable WHUES = (gentate) (int substitution of points)
INSERT TABLE = top Eable VALUES = (gentate), int substitution of points)
Substitution of the value of points of p
               ELSE SELECT * FROM error_table WHERE error_no=1"

COMMIT TRAN">

<INPUT TYPE="LOCAL" NAME=tid>
ENTER ACCOUNT NUMBER:

<INPUT TYPE="MSRT1" SIZE=90 NAME=account>
              ENTER AMOUNT

<INPUT TYPE="AMT" SIZE=8 NAME=amount>
REDEEM POINTS?

<INPUT TYPE="INT" SIZE=6 NAME=points>

<INPUT TYPE="AUTOSUBMIT">

<INPUT TYPE="AUTOSUBMI
                 </BODY>
                 </HTML>
8.b. Transaction Accepted Response
              $999999</P>
                 AUTH NUMBER
                 CUSTOMER SIGNATURE
              POINTS REDEEMED:
POINTS EARNED:
CURRENT POINT BALANCE:
                                                                                                                                                                                                                                                                               999999
               <FORM>
            APPROVED:99999999999999/P>
</BODY>
</HTML>
  8.c. Transaction Declined or Submit Error Response
                  <HTML>

◆BODY>
DECLINED <

✓BODY>
✓HTML>

                                                                                                                                                                                                                                                               FIG.20
```

```
9.a. Transaction Request HTML+D
  →TML>
  ₹009
  FORM ACTION=dbase_URL
         METHOD=SOL
                  "SELECT fields FROM table WHERE condition">
  ANPUT TYPE="LOCAL" NAME=to>
  ENTER SEARCH TABLE NAME:
  <!NPUT TYPE='TEXT" SIZE=10 NAME=table>
  ENTER SEARCH FIELD NAMES:
  <!NPUT TYPE="TEXT" SIZE=100 NAME=fields>
  ENTER SEARCH CONDITION:

⟨NPUT TYPE="TEXT" SIZE=50 NAME=condition>

√NPUT TYPE="AUTOSUBMIT">

  </FORM>
  </BODY>
  ✓HTML>
9.b. Transaction Response
  4TML>
 <800Y>
 <FORM ACTION=TO PRINTER METHOD=POST>
 FIELD1 FIELD2 FIELD3 -----
                              FIELDN
                                      XXXXX
         XXXXX
                              XXXXX
                                       √p>
 XXXX XXXX
                              XXXX
                                       XXXXX XXXXX
                 XXXXX
 </FORM>
 </BODY>
 </HIML>
```

```
10.a Transaction Request HTML+D
 <HTML>
 <BODY>
 <FORM ACTION=dbase_URL
       METHOD=SQL
       * INSERT TABLE=log_table VALUES=( getdate(), tid, gross_sales, opn_chks, voids,
       emp_disc, mgr_disc, vip_card, man_over, coupons, sales_tax, c_dep1, c_dep2,
       c_dep3, c_dep4, chg_fund.cc_dep, batch_no, chrg_sales, paid_outs, co_sales, cc_sales, te_sales, grcss_sales - opn_chks - voids - emp_disc - mgr_disc - vip_card-
       man_over - coupons - sales_tax, gross_sales - opn_chks - voids -
       emp_disc - mgr_disc - vip_card - man_over - coupons - c_dep1 - c_dep2 - c_dep3 - c_dep4 - chg_fund - cc_dep - batch_no - chrg_sales - paid_outs)
SELECT FROM log_table WHERE trandate = getdate()">
<INPUT TYPE="LOCAL" NAME=tid>
ENTER GROSS SALES:
<!NPUT TYPE="AMT" SIZE=8 NAME=gross_sales>
ENTER OPEN CHECKS:
<INPUT TYPE="INT" SIZE=7 NAME=opn chks>
ENTER VOIDS:
<INPUT TYPE="INT" SIZE=7 NAME=voids>
ENTER EMP DISCOUNTS:
<INPUT TYPE="INT" SIZE=7 NAME=emp_disc>
ENTER MGR DISCOUNT:
<!NPUT TYPE="INT" SIZE=7 NAME=mgr_disc>
ENTER VIP CARD:
<!NPUT TYPE="INT" SIZE=7 NAME=vip_card>
ENTER MANUAL OVERRINGS:
<!NPUT TYPE="INT" SIZE=7 NAME=man_over>
ENTER COUPONS:
<INPUT TYPE="INT" SIZE=7 NAME=coupons>
ENTER SALES TAX
<INPUT TYPE="AMT" SIZE=8 NAME=sales_tax>
ENTER CASH DEPOSIT 1:

<INPUT TYPE="AMT" SIZE=8 NAME=c_dep1>

ENTER CASH DEPOSIT 2:
<INPUT TYPE="AMT" SIZE=8 NAME=c_dep2>
ENTER CASH DEPOSIT 3:
<INPUT TYPE="AMT" SIZE=8 NAME=c dep3>
ENTER CASH DEPOSIT 4:
INPUT TYPE="AMT" SIZE=8 NAME=c_dep4>
ENTER CHANGE FUND:
<INPUT TYPE="AMT" SIZE=8 NAME=chg_fund>
```

```
ENTER CC DEPOSIT:
            <!NPUT TYPE="AMT" SIZE=8 NAME=cc_dep>
            ENTER BATCH #
            <INPUT TYPE="INT" SIZE=3 NAME=batch_no>
           ENTER CHARGE SALES:
           <!NPUT TYPE="AMT" SIZE=8 NAME=chrg_sales>
          ENTER PAID OUTS:
<INPUT TYPE="INT" SIZE=8 NAME=paid_outs>
ENTER CARRY OUT SALES:

**INFO TABLE STATE S
          <!NPUT TYPE="AMT" SIZE=8 NAME=co_sales>
ENTER CREDIT CARD SALES:
         <INPUT TYPE="AMT" SIZE=8 NAME=cc_sales>
ENTER TAX EXEMPT SALES:
<INPUT TYPE="AMT" SIZE=8 NAME=te_sales>
<INPUT TYPE="AUTOSUBMIT">
          </FORM>
          </BODY>
         </HTML>
10.b. Transaction Response
          <HTML>
         FORM ACTION=TO PRINTER METHOD=POST>
JUNE 1 1995 10:30AM DAILY REPORT
TERMINAL ID: 999999999
          GROSS SALES
                                                                                                                                                                     999999.99</P>
          VOIDS
EMP DISCOUNTS
MANAGER DISCOUNTS
VIP CARD
                                                                                                                                  99
                                                                                                                                                                         99999.99</P>
                                                                                                                                  99
                                                                                                                                                                  99
         COUPONS
MANUAL OVERRINGS
SALES TAX
CASH DEPOSIT 1
CASH DEPOSIT 2
CASH DEPOSIT 3
CASH DEPOSIT 4
CASH DEPOSIT 5
CASH DEPOSIT 5
CHANGE FUND
                                                                                                                                  99
                                                                                                                                  <u>9</u>9
         CHANGE FUND
CC DEPOSIT
CHARGE SALES
PAID OUTS
                                                                                                                       999
                                                                                                                                                                     999999.99</P>
                                                                                                                              99
         CARRY OUT SALES
CREDIT CARD SALES
TAX EXEMPT SALES
                                                                                                                                                                          99999.99</P>
                                                                                                                                                                     999999.99</P>
      NET SALES
OVER/SHORT
                                                                                                                                                                            9999999</P>
                                                                                                                                                                            9999999</P>
    </FORM>
    </BODY>
     </HTML>
```

11.a. Transaction Request HTML+D

```
<HTML>
<800Y>
<FORM ACTION=MAIL TO: mail_to>
ENTER MAIL ADDRESS:
<INPUT TYPE="TEXT" SIZE=20 NAME=mail_to>
ENTER MESSAGE:
<INPUT TYPE="TEXT" SIZE=100>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>
```

FIG.23

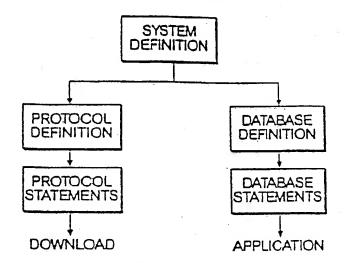


FIG.24A

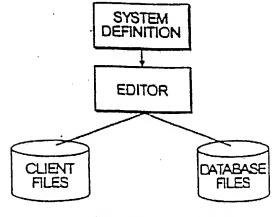


FIG.24B